

THE INFLUENCE OF WACO'S ECONOMIC HISTORY ON ITS CURRENT STATUS AND
FUTURE GROWTH:
A RECONSIDERATION BASED ON ITS ECONOMIC FUNDAMENTALS & POTENTIAL

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ABSTRACT

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The theory of the creative class is a way of understanding how post-industrial cities drive economic growth. This thesis will evaluate the city of Waco's near-term economic potential within the framework of this theory. In order to understand Waco's future, an overview of the economic history of the city will precede an analysis of Waco's current economic situation. Following this will be a discussion of the fundamentals of the theory of the creative class, as well as an explanation of how it translates to higher economic growth and resilience for cities that capitalize on their creative potential. Finally, Waco's economic potential will be evaluated based on the primary three factors that underpin the creative economy: Technology, Tolerance, and Talent.

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Introduction

Nestled on the banks of the Brazos River in Central Texas, the city of Waco is situated in the very heart of Texas. Founded in 1849, the city began as a small trading post frequented by travelers moving between the far-flung towns of Austin, Dallas, San Antonio, and Houston. In the years following the Civil War, Waco became the largest inland cotton center in the South. It played host to important military assets during the first and second World Wars. Despite setbacks throughout the 20th century, it became a vibrant, diverse city that embraces its rich history as a center of commerce and trade.

This thesis will examine the history of the city and how that history defined its economic development up to the present day. In order to view the state of the city's economy through the lens of modern urban development theory, the following analysis will describe and apply Richard Florida's Creative Class theory to the city of Waco. Based on the framework constructed using the theory, this thesis will evaluate how well Waco is positioned to leverage its underlying economic fundamentals into long-term, sustainable economic growth in the 21st century.

To briefly describe the premise of Creative Class-centric urban development theory, it contends that the most successful post-industrial economies are predominantly fueled by knowledge and innovation. People whose jobs are primarily concerned with high degrees of abstract thinking, the creation of new technologies or ideas, and judgement-based decision making are members of the creative class. Cities with higher concentrations of these people relative to the numbers of lower-sophistication working- and service-class jobs typically have more robust, vibrant, and resilient economies that grow at much faster rates than cities without high concentrations of these workers. These cities also happen to be places that are attractive places to live for members of the creative class, and possess superior amenities, the right kinds of

infrastructure, and other characteristics that drive its so-called quality of place. Chapter 3 discusses the idea and framework of the creative class model of urban development more extensively.

As a brief roadmap of the structure and content of this thesis, it will begin with a discussion of the history of the city of Waco in order to provide context for readers who are unfamiliar with the city or the Central Texas region. This historical discussion will be followed by an overview of Waco's economic structure based on the composition of its labor force and the primary industries that underpin its economy. Next, a discussion of the creative class framework of urban development will be discussed, including the most important metrics that characterize cities with the potential to grow substantially based on this model. Finally, the creative class framework will be applied to Waco, focusing on the most recent and significant developments in the community that have laid the foundation for a new age of growth and economic expansion. This final section will evaluate the extent to which Waco can leverage its potential in the three most important characteristics of a post-industrial city – Talent, Tolerance, and Technology – in order to fuel sustainable economic growth into the near future.

Chapter 1 – Historical Context

Understanding the history of Waco and its economy is crucial to examining the status of the city today. At various points in its history, the city has undergone cycles of boom and bust. Waco has been the cotton-producing economic powerhouse of Texas as well as the most important river crossing on the cattlemen's Chisolm Trail, but it has also fallen victim to catastrophic natural disasters that shaped the city's history and economy for decades thereafter. The city has served as a critical military asset, as the educational and religious center of Texas, and as a tourist destination for those seeking to relax in its artesian spring-fed spas and explore the history of various famous Texas institutions. However, the city has also been notorious as the site of racially-charged vigilantism, sieges against violent religious cults, and more recently for shootouts between rival biker gangs. Recognition of these ebbs and flows in history and economic prosperity over the progression of Waco's development informs an analysis of how and why the city exists as it does today, as well as potential trends that Waco might experience in the near future.

The City of Waco

Before examining the economic history of the city, a description of the city and its surrounding geography would be conducive to building familiarity with subjects that will be included later in the analysis. Waco is located in central Texas and is the principal city of McLennan County. The Waco Metropolitan Statistical Area, which is defined by the US Census Bureau as a geographical region of relatively high population density at its core and close economic ties throughout the area, is anchored on the city of Waco. The Metropolitan Statistical Area is comprised of both McLennan and Falls Counties and includes cities throughout both

counties that are integrated into Waco's broader economy. Waco lies halfway between the cities of Dallas and Austin and is situated near the confluence of the Brazos River and the Bosque River. Geographically, the city is near the western border of the Blackland Prairie, which is separated from the Grand Prairie to the west by the Balcones Fault Zone. According to a study conducted by Prewitt and Associates, Inc. in 2004, the Waco region has a humid, subtropical climate with an average growing season of 248 days. The average daily maximum and minimum temperatures are 78°F and 56°F respectively, and monthly means range from 46°F in January to 86°F in July and August. Precipitation is most commonly rainfall and very rarely snow. The region receives an annual mean of 31.0 inches of rainfall.¹

Waco's warm climate, arable soil, abundant water, and centralized location within Texas positioned it to become a nexus of commerce since its official foundation in 1849. However, the context provided by this chapter's historical evaluation of Waco's economy will be focused on the period from the end of the Civil War in 1865 until the economic recession of 2009, as this period is the most relevant to the present-day state of the economy of central Texas.

Reconstruction to the turn of the century: 1865 – 1900

Waco's location in the midst of a booming plantation economy, which relied on slavery for its viability before the onset of the Civil War, led many of the town's citizens sympathetic to the Southern cause when the war broke out. According to Roger Conger in his contributions to the Texas State Historical Association's *Handbook of Texas*, seventeen companies of Confederate soldiers were recruited from Waco and the surrounding area. The city also contributed six confederate generals who were born in Waco. Wacoan soldiers were present at

¹ Kibler, K. W., & Gibbs, T. (2004). *Archeological survey of 61 acres along the Bosque River, Waco, McLennan County, Texas*. Prewitt and Associates, Cultural Resources Services.

battlefields across the nation and Wacoan cotton produced for the Confederacy clothed significant portions of the Confederate ranks. Despite the consistent demand for cotton, Waco's economy sputtered at the time due to the Confederate military's drain on manpower.

When the war ended in 1865, soldiers poured back into their home states from battlefields across the country. By the time the Confederacy had surrendered, Waco was deeply impoverished due to the massive drain on all its resources caused by the war. However, having largely been spared from the destruction of battle, the city's intact infrastructure and healthy farmland allowed it to experience a relatively rapid recovery compared to other, more heavily damaged areas of the South. Immediately after the war, however, Reconstruction would stoke tensions between the local residents and the restored Union government, as well as inflame tensions between the newly-freed slaves and the white population. Seizure of formerly confederate-run cotton production facilities by the federal government was a particularly intense flashpoint, as were several high-profile court cases involving crimes against the black community in Waco.² According to historian Patricia Ward Wallace of Baylor University, in *Waco, A Sesquicentennial History*, despite these setbacks and disruptions in the social order of the city, "Waco emerged from Reconstruction into its greatest period of growth."³

The growth that Waco experienced after the end of Reconstruction and the Civil War was largely a result of several prominent infrastructure projects that would establish Waco as the most important center of commerce in central Texas. For much of its history until 1866, Waco was the site of several ferry stations that provided transportation across the Brazos River. These ferries were run as small individual operations and were rather inefficient during periods of heavy traffic. Joseph W. Speight recognized this problem in 1866 and suggested the construction of a bridge spanning the Brazos. After speaking with lawmakers, the Waco Bridge

² N., R. (2010, June 15). WACO, TX. Retrieved from <https://tshaonline.org/handbook/online/articles/hdw01>

³ Wallace, P. W. (1999). *Waco: A sesquicentennial history*. Virginia Beach, VA: Donning. p45

Company was incorporated by a state charter shortly thereafter. The company's charter also prohibited ferry service within five miles of Waco in order to protect the fledgling company from competition, and the charter allowed the firm to raise capital through the sale of public stock in the company. The president of the newly founded company, John T. Flint sought partners who could help him construct the bridge, and eventually recruited the services of the engineer Thomas M. Griffith and suppliers John A. Roebling & Son from New York City. Instead of the traditional iron-arch bridge that was common across the country at the time, John Flint and his Waco Bridge Company decided to build a suspension bridge, which was a newer design that would draw attention to the project and to the city.

The bridge itself was a tourist attraction even while it was still under construction. The newfound attention garnered by the new suspension bridge brought new residents and a surge of investment in the city. The Waco suspension bridge was the largest single-span bridge in the United States, giving Waco a moment the national spotlight. The Waco Bridge Company profited off of the commerce that flowed across the Brazos by charging tolls to travelers, which captured a portion of the economic activity flowing through Waco and circulating it into the local economy. In addition to tolls, travelers would buy various supplies from grocers, tradespeople, and other vendors before crossing the river, further contributing to the local economy. Hotels were built to accommodate travelers who would extend their stay, allowing the city to reap even more revenue from visitors to Waco. The first city directory, published in 1876, illustrated Waco's flourishing economy. The city, "hosted two flour mills, 158 brick business houses, an ice factory, a telegraph, five newspapers, a carriage shop, and two foundries."⁴ Waco's flourishing economy also drove a significant increase in population. "According to the US Census of 1870, the city's population was 3,008; by 1880, Waco had more

⁴ Wallace, P. W. (1999). *Waco: A sesquicentennial history*. Virginia Beach, VA: Donning. p48

than doubled to 7,295, and in 1890 doubled again to 14,445. During this period, Waco was larger than Dallas, Fort Worth, and El Paso and the future looked promising.”⁵

The construction of the suspension bridge over the Brazos made Waco a key stopping point for cattlemen from south Texas. The southern route these cattlemen used as they drove their livestock north to the railroad terminals in Kansas and Nebraska. Even before the construction of the suspension bridge, from 1868 to 1871 more than 600,000 steers passed through Waco.⁶ The suspension bridge made crossing the Brazos River immensely easier, and cattle drives would divert their route from the west to visit Waco in order to safely cross the river. Each herd would camp outside the city and cattlemen responsible for each herd would take turns going into Waco to buy supplies, visit saloons, and solicit entertainment from prostitutes in the city’s red-light district, which came to be known as the Reservation. When the herds crossed the bridge, the Waco Bridge Company charged a toll of five cents per head of cattle, plus additional tolls for each man, wagon, horse, and pack animal that crossed as well.⁷ After driving their herds to market and reaping their reward, cattlemen and hired hands would return to Waco with the gold and silver they received as payment. This influx of hard currency was a major benefit to the historically cash-poor, agrarian central Texas economy. The tolls paid by cattlemen and the spending on supplies and entertainment while visiting the city led to a boom in the city’s economy.

At the same time, he conceived of the plan to build the suspension bridge, Joseph Speight also suggested the construction of a railroad spur that would connect Waco with the larger railroad network spanning Texas and the rest of the nation. The spur would connect Waco the Bremond, the nearest stop on the Houston and Texas Central Railroad that connected Houston to

⁵ Wallace, P. W. (1999). *Waco: A sesquicentennial history*. Virginia Beach, VA: Donning. p45

⁶ Wallace, P. W. (1999). *Waco: A sesquicentennial history*. Virginia Beach, VA: Donning. p46

⁷ Wallace, P. W. (1999). *Waco: A sesquicentennial history*. Virginia Beach, VA: Donning. p46

Dallas. Such a project required the construction of 47 miles of track, and in 1866 the city approved the founding of the Waco Tap Railroad to complete the project. By 1872 construction was complete, and Waco had full access to freight and passenger rail service via a depot in East Waco. The first train steamed into Waco in September of 1872.⁸ Integration into the national railroad network was as crucial to Waco's development as the construction of the suspension bridge due to its support of the burgeoning agricultural industry in the region surrounding Waco.

Cotton was the region's primary export and cash crop at a time when demand was surging around the world. Large portions of Europe and America were undergoing industrialization and population growth, driving the need for clothing and the raw materials to produce the fabrics out of which clothes were created. Before the Civil War, cotton production was only viable in river bottom land where the soil was soft and rich in nutrients. This limited cotton production capacity in central Texas because the region was situated on the Blackland prairie, where the soil was as rich in nutrients as the river bottom but not soft enough to plough with technology available at the time. However, the development of the steel breaking plow allowed harder soil to be broken up and made into arable farmland. This technological advance expanded cotton production to the Blackland prairie, thereby admitting a significantly larger portion of central Texas into the lucrative cotton industry. By the time steel production across the United States allowed this technology to proliferate to the mass market, Waco was well-prepared to take advantage of the resultant boom in cotton production. Its newly constructed infrastructure attracted the produce of cotton farmers as far away as 100 miles or more and throughout many nearby counties. Waco's cotton trade boomed as brokers and buyers set up offices in Waco's marketplaces, where they would purchase large amounts of cotton from farmers, then ship the cotton to Galveston and New Orleans, and from there to markets in

⁸ Wallace, P. W. (1999). *Waco: A sesquicentennial history*. Virginia Beach, VA: Donning. p46

Germany, Italy, France, Spain, Brazil, and India.⁹ Waco's cotton boom led to the construction of more railroads. By 1884, there were roughly 12,000 people living in Waco, and an estimated 50,000 bales of cotton, 900,000 pounds of wool, and 500,000 pounds of hides were being shipped through the city each year. Industries in the city at that time included a cotton factory, a woolens factory, two cottonseed oil mills, and two planing mills, each dedicated to utilizing the agricultural products being bought and sold in the city.¹⁰ In 1894, Waco was declared by *Cutter's Guide to the City of Waco* as the "largest interior cotton market in Texas, and probably in the South."¹¹

During this period of growth, Waco acquired its reputation as the "Athens of Texas," due to the significant number of private religious colleges such as Baylor, Texas Christian University, and Paul Quinn College.¹² Baylor University was created by the merger of Waco College and Baylor College after Baylor moved from its original location in Independence, Texas in 1861. Although Texas Christian University was founded in Waco, it later moved to Fort Worth where it still exists today. Paul Quinn College, which was founded in 1872, primarily served the city's African American population. Together, these three institutions formed the educational center of Texas, drawing educated professors, business people, and students of all sorts to the city.

It was also during this era of prosperity that city leaders developed ways to attract visitors to Waco in increasingly ambitious ways by shaping the image it projected to the rest of the country. Waco's earliest residents, the Native Americans of the Hueco tribe, settled in the region do to the prolific spring water available in the area. The mineral-charged artesian wells were an

⁹ Wallace, P. W. (1999). *Waco: A sesquicentennial history*. Virginia Beach, VA: Donning. p47

¹⁰ N., R. (2010, June 15). WACO, TX. Retrieved from <https://tshaonline.org/handbook/online/articles/hdw01>

¹¹ Wallace, P. W. (1999). *Waco: A sesquicentennial history*. Virginia Beach, VA: Donning. p47

¹² Conger, R. N. (1945). *Highlights of Waco history*. Waco, TX: Hill Printing & Stationery.

important source of clean drinking water for these Native Americans and for the city's earliest pioneer settlers. As Waco grew over time, these wells became increasingly important for both their use as a source of drinking water as well as for the perceived health benefits of the minerals present in the spring water. The stratum of mineral-charged water was tapped and soon after Waco had more overflowing artesian wells than any other city in the world. In fact, Waco became known as the "Geyser City" near the end of the 19th century due to its popularity as a health resort. This popularity resulted from the heavy advertising city residents undertook to present their city as a center of health and wellness, alongside its existing reputation as an educational center and nexus of commerce. Two large natatoriums were constructed as health resorts and included lodging and restaurants for visitors to accommodate extended stays. The wells supplied the city with water through a private company that owned the piping infrastructure through which the water flowed. Eventually the city of Waco acquired the rights to that infrastructure in 1904.¹³

The most prominent attraction developed by citizens of Waco to showcase their city, however, came in 1894 when civic leaders initiated a full-scale exposition called the Texas Cotton Palace. A large auditorium was built in Padgitt Park in Waco and the first exposition was executed successfully. However, six months later the complex was destroyed by a fire and the event was discontinued until 1909.

The turn of the century to the year of the tornado: 1901 – 1953

In 1909, the Young Men's Business League raised \$60,000 from the Waco community to rebuild the Cotton Palace complex in the style of the prominent world fairs and expositions of

¹³ Conger, R. N. (1945). *Highlights of Waco history*. Waco, TX: Hill Printing & Stationery p57

the 19th century. For the next quarter century, the Texas Cotton Palace was one of the most prominent fairs in the south, drawing visitors from across the nation to Waco for the social festivities. In 1913, 500,000 people came to Waco during the Texas Cotton Palace festival, and in 1923 the highest single-day attendance peaked at 117,208 people. During the entire span of the festival's existence, more than eight million people visited Waco to participate. The festival included parades, expositions of agriculture and livestock, competitions, contests, art shows, horse racing, athletic events, operas, and concerts. The Queen's Ball was the city's most prominent social event each year, drawing national attention as one of the preeminent celebrations in the south. However, after years of prominence, the festival was discontinued due to economic hardship brought on by the Great Depression in 1931.¹⁴

The early 20th century was characterized by large-scale improvements to the city's infrastructure. In 1904, the city authorities took control of Waco's water piping infrastructure, and in 1903, major street-paving operations began in order to alleviate the problems of thick mud and dust arising from the dirt streets in place throughout Waco. While major thoroughfares were graveled before the paving efforts, it was still an unpleasant exercise to use Waco's streets in nearly any type of weather until the paving efforts were completed.¹⁵ By 1901, the Citizen Railway company had constructed the infrastructure and built out the operations of a system of twenty electric trolleys to facilitate intra-city transportation to Waco residents. In the late 1800's, the city built a system of city parks using land provided by private citizens in an effort to beautify the city and increase residents' standard of living. In 1913, the city became connected to Dallas via an electric interurban railway, allowing increasingly large amounts of visitors and businesspeople to travel to and from the cities.¹⁶

¹⁴ Conger, R. N. (1945). *Highlights of Waco history*. Waco, TX: Hill Printing & Stationery p65

¹⁵ Conger, R. N. (1945). *Highlights of Waco history*. Waco, TX: Hill Printing & Stationery p67

¹⁶ N., R. (2010, June 15). WACO, TX. Retrieved from <https://tshaonline.org/handbook/online/articles/hdw01>

The most prominent construction project undertaken in Waco during the first half of the twentieth century was that of the Amicable Life Insurance Building, known widely as the ALICO building. By 1914, Waco's population had risen to 30,000 and the city was rapidly becoming an important center for the state's insurance industry. The ALICO building was 22 stories tall, deliberately designed to be the tallest building in Texas at the time, ahead of the Praetorian Building in Dallas which was completed in the previous year. The ALICO was built to the most advanced standards of the time, with a steel-reinforced structural frame, electric lighting, several elevators, and a self-sufficient water supply that was drawn from the artesian springs beneath the city via a well in the building's basement. The steel frame was designed to be rigid enough to handle hurricane-force weather and flexible enough to avoid structural damage due to sustained gusts and other strong weather. By all counts, the building became a symbol of the strength and pride of the city of Waco.¹⁷

When World War I began in 1917, Waco was selected as the site of Camp MacArthur. Here, the American military trained its infantry on a 10,000-acre base in the northwest part of the city. Thirty-five thousand troops were assigned to the base between 1917 and 1919, during which Waco's population was still close to 30,000. The creation of the base essentially doubled the city's population for the duration of the war. The presence of the soldiers provided a significant boost for the local economy, as their spending off-base and visits by their family and friends stimulated the city's retail and hospitality industries. In order to limit temptations for soldiers while off-base, the military encouraged the city government to crack down on the Reservation and its brothels, bringing an end to Waco's longtime prostitution industry.¹⁸

¹⁷ ::ALICO:: ALICO History. (n.d.). Retrieved from <http://www.alicobuilding.com/Heritage/default.php>

¹⁸ N., R. (2010, June 15). WACO, TX. Retrieved from <https://tshaonline.org/handbook/online/articles/hdw01>

As Waco's urban economy grew and more opportunities for employment emerged between 1900 and 1930, rural blacks moved into the city. Over this period, the racial composition of the city had changed significantly. By the 1920's, a black middle class had emerged as these former agricultural workers began to take advantage of opportunities in the city. Despite this positive development, this same period was characterized by horrific violence against members of the black community. Public lynchings occurred in the city in 1905, 1915, and 1916. In May 1916, Jesse Washington, a seventeen-year-old black man was arrested for the murder of a white woman. Washington eventually confessed to raping and killing the woman and was held in a Dallas jail until his trial to protect him from retaliation by members of the community in Waco. However, when his trial commenced, Washington found himself in a full courtroom before a panel of twelve white male jurors, who found him guilty with nearly no deliberation. After his conviction, Washington was taken out the back of the courthouse by the authorities, where a mob had gathered during the trial. Washington was captured by the mob, was dragged and beaten through the streets until he was hung and burned in the city hall grounds. This event became known as the 'Waco Horror' and remains a dark point in the city's history. The aftermath of this event led to a movement spearheaded by the NAACP dedicated to ending lynching around the country through the passage of anti-lynching laws around the country.¹⁹ It was during this period of heightened tensions between black and white residents of Waco that the resurgence of the Ku Klux Klan began as a powerful political force in many areas of the south, including Waco. In fact, Waco's Hotel Raleigh was the site of a major conference of the Texas Ku Klux Klan in 1922.²⁰ In 1923, upwards of 2,000 Klansmen paraded through Waco as a demonstration of strength, and many of Waco's most prominent citizens at the time, including

¹⁹ Terry, K. (n.d.). Jesse Washington Lynching. Retrieved from <https://wacohistory.org/items/show/55>

²⁰ Ames, E. S. (2016). *Waco*. Charleston, SC: Arcadia Publishing. P45

business and political leaders, held at least implicit support for the Klan.²¹ The Klan maintained a significant presence in statewide politics until the public became discouraged by the blatant acts of violence perpetrated by Klan members within the community and by the hardships of the Great Depression that brought issues of survival and desperation to the forefront of public consciousness.²²

By the time the reverberations of the Great Depression were felt in Waco, the city's population had increased to more than 50,000 people. The collapse of the economy cut short the momentum of progress that had carried the city into the 20th century. Prices for cotton and agricultural products at the center of Waco's economy fell, causing farmers to suffer severe economic hardship while many businesses in the city were forced to lay off employees or close down entirely. The Texas Cotton Palace festival, the symbol of Waco's prominence in the national economy, was shut down.²³ In the early stages of the Depression, roughly 60,000 Texas farm families, including many from Central Texas, were evicted from their homesteads and became migrant workers. Efforts made by the Federal Government through the New Deal helped create employment opportunities and infused the city with federal money to assist in infrastructure development projects such as the construction of University High School. Waco also became a distribution hub for the federal government's surplus commodities program.²⁴ Even during the shadow of the Depression, Waco remained the anchor of the central Texas economy.

²¹ N., R. (2010, June 15). WACO, TX. Retrieved from <https://tshaonline.org/handbook/online/articles/hdw01>

²² Christopher. (2010, June 15). KU KLUX KLAN. Retrieved from <https://tshaonline.org/handbook/online/articles/vek02>

²³ N., R. (2010, June 15). WACO, TX. Retrieved from <https://tshaonline.org/handbook/online/articles/hdw01>

²⁴ Working through the Great Depression. (n.d.). Retrieved from <http://wacohistoryproject.org/Moments/depression.html>

When World War II erupted, the United States military immediately stimulated demand for cotton products to equip the soldiers who would eventually fight in Europe and the Pacific. In addition to the traditional agrarian aspects of the city's economy, the military constructed war plants and military bases in and around Waco that bolstered the city's heavy industrial capacity. Waco was the primary manufacturer of the Army's cots, tents, mattresses, and other canvas or cloth products. The war effort also led to the establishment of the Waco Army Flying School eight miles north of the city, as well as the Blackland Army Air Field in China Spring, a town only a few miles from Waco. In McGregor, another nearby rural town, the Army constructed the Bluebonnet Ordnance Plant, which manufactured TNT, bombs, ammonium nitrate, and other munitions components for the military. It was one of only four ordnance plants in the United States during WWII. These investments by the US military in Waco's industrial infrastructure made it an economic hotbed where it had once been a stagnant agrarian economy during the depths of the Great Depression. The employment opportunities that were created by the advent of heavy industry in Waco consumed much of the slack in Waco's labor force and included large numbers of female workers. In 1942, an estimated 60% of the workforce in Waco's nine defense-related factories were women.²⁵ The surge in employment opportunities in Waco as a result of its burgeoning defense industry increased pressure on the housing supply, leading to high rents across most of the city's residential areas as service members and military families flocked to Waco. The demand for living space created pressure on the city's poorer residents as it became more expensive for the lower classes to live in the neighborhoods in which they had historically lived. Toward the end of the War, Waco was selected to host the site of a new General Tire and Rubber factory, the first in the southwest. The investments made in the city's economy during World War II laid the foundations for the strength of Waco's economy into the

²⁵ N., R. (2010, June 15). WACO, TX. Retrieved from <https://tshaonline.org/handbook/online/articles/hdw01>

post-war era and gave rise to a new industrial middle class, thereby inducing significant change in the composition and structure of Waco's economy.

After the war concluded, Waco's numerous military installations were closed down. However, in the years immediately after, many of the former military facilities were reactivated or repurposed for private industry. The Waco Army Airfield was reopened as Connally Air Force Base and continued to serve as a pilot instructor school and subsequently as a training school for navigators, radar operators, and bombardiers.²⁶ Blackland Army Airfield was later converted into the Waco Municipal Airport by 1950.²⁷ The Bluebonnet Ordnance Plant was repurposed to enable the manufacture and development of ammonium-nitrate based solid rocket propellants. Eventually, much of the land was returned to agricultural use with the exception of a portion that would be used by a number of companies as a rocket testing facility.²⁸ Due to these and other conversions of wartime facilities, and the development of new industrial enterprises, Waco continued to grow throughout the 1940's and 1950's. By 1952, "the city was the sixth largest industrial center in the state of Texas, boasting more than 250 factories producing cotton goods, tires, glass, furniture, sporting goods, caskets, dry-cleaning equipment, and other products."²⁹

Waco's vibrant downtown district was ripped apart on May 11, 1953, when the much of the city's urban core was destroyed by a powerful tornado. In total, 114 people died, 145 were seriously injured, 196 business buildings were completely levelled and another 396 were damaged to the point where they were simply demolished. The storm hit right as the

²⁶ Leatherwood, A. (2010, June 15). JAMES CONNALLY AIR FORCE BASE. Retrieved from <https://tshaonline.org/handbook/online/articles/qbj01>

²⁷ Leatherwood, A. (2010, June 12). BLACKLAND ARMY AIR FIELD. Retrieved from <https://tshaonline.org/handbook/online/articles/qcb04>

²⁸ Gately, P. J. (n.d.). McGregor: Before SpaceX, facility produced bombs and lots of them. Retrieved from <https://www.kwtx.com/content/news/Before-SpaceX-McGregor-facility-produced-bombs-and-lots-of-them-430442353.html>

²⁹ N., R. (2010, June 15). WACO, TX. Retrieved from <https://tshaonline.org/handbook/online/articles/hdw01>

suburbanization of American cities was beginning, and development of residential areas, shopping malls, and other amenities to the west of downtown had already begun in earnest. Consumers drifted away from Waco's formerly vibrant downtown neighborhoods and shopping districts in favor of the newer suburban developments.³⁰ Waco's booming historic center had been hollowed out by the tornado, and there was little incentive at the time to restore it to its lost greatness.

Aftermath of the Tornado to the Branch Davidians: 1954 – 1999

The sheer vastness of the destruction wrought by the Waco Tornado of 1953 left its old core business district nearly completely empty. The most prominent survivor of the storm's destruction of downtown was the ALICO Building, whose steel frame and resilient construction left it completely unscathed by the otherwise catastrophic storm. The hollowing out of the city's urban core was exacerbated by 'white flight,' a phenomenon that is characterized by the movement of white middle-class populations away from racially mixed urban regions to more racially homogenous suburbs. This trend was also driven in part by the city's racially prejudiced past when *Brown v. Board of Education* (1954) and the eventual passage of the Civil Rights Act in 1964 enforced the desegregation of schools and public spaces. Bob Darden, a Baylor communications professor and author of several books about the city of Waco, argues that the tornado and its destructive effect on Waco was not the cause of this migration, but rather coincided with factors that were occurring at the same time. People were pursuing homes in the suburbs anyway, and instead of rebuilding their demolished shops and businesses, the city's

³⁰ N., R. (2010, June 15). WACO, TX. Retrieved from <https://tshaonline.org/handbook/online/articles/hdw01>

commercial class followed their customers to the suburbs. “Downtown died – and stayed dead for half a century.”³¹

In 1958, the City of Waco’s Urban Renewal Agency developed a plan to revitalize several areas of the city in order to eliminate run-down buildings and improve the city’s aesthetic appeal. This multimillion-dollar effort took place over the next twenty years and resulted in the demolition of 1,200 homes and 300 commercial buildings.³² Businesses and residents who were affected by the project were directed to either improve their properties using financial aid from the program or relocate to other locations. The cornerstone of the project was the conversion of Austin Avenue, one of the city’s main downtown thoroughfares, into a pedestrian-only outdoor shopping mall, which was completed in 1971. Various accommodations for shoppers, including large awnings, seating areas, and electric trams were included to enhance the appeal of the new shopping district. Although the project initially appeared successful, by the late 1970’s the stores that anchored the shopping district, such as Cox’s, Monnigs, and J.C. Penney followed their customers to the newly built, indoor and air-conditioned Richland Mall in the suburbs of Waco. The pedestrian mall was eventually chalked up as a failure, and the area was converted back to a two-way street for automobile traffic.³³ According to Joe Holley, a former Waco resident and reporter for the Houston Chronicle, the project had “bulldozed away whole neighborhoods without regard for history or human ties,” and was an “ill-conceived experiment that transformed

³¹ Holley, J. (2015, May 09). Waco only now recovering from the big tornado of '53. Retrieved from <https://www.houstonchronicle.com/news/columnists/native-texan/article/Waco-only-now-recovering-from-the-big-tornado-of-6251845.php>

³² Vaughan, B., & Hunt, G. (2014, October 07). The Rise and Fall of the Austin Avenue Pedestrian Mall., Waco, Texas. Retrieved from <https://blogs.baylor.edu/texascollection/2014/10/07/the-rise-and-fall-of-the-austin-avenue-pedestrian-mall-waco-texas/>

³³ Vaughan, B., & Hunt, G. (2014, October 07). The Rise and Fall of the Austin Avenue Pedestrian Mall., Waco, Texas. Retrieved from <https://blogs.baylor.edu/texascollection/2014/10/07/the-rise-and-fall-of-the-austin-avenue-pedestrian-mall-waco-texas/>

Waco's main thoroughfare into an outdoor pedestrian mall (with no pedestrians).”³⁴ However, the redevelopment effort did improve parts of the city. The Urban Renewal Project assisted in the construction of new apartment complexes, a shopping center near Baylor University, a convention center, and the Texas Ranger Hall of Fame and Museum.³⁵ Other contemporary efforts by the City of Waco led to the construction of the Cameron Park Zoo and the Texas Sports Hall of Fame in order to attract visitors to the city. By 1980, the city's population cleared 100,000 people.³⁶

The most prominent event in Waco's recent history began on February 28, 1993, when a shootout occurred between agents of the United States Bureau of Alcohol Tobacco and Firearms (ATF) and members of the Branch Davidians, a small religious sect led by David Koresh. The federal agents began the standoff by advancing on the Davidian's compound, Mount Carmel Center, roughly 13 miles from Waco in Elk, Texas. The purpose of the initial assault was to secure illegal weapons being manufactured and hoarded by the organization. In the initial gun battle, four federal agents and six Branch Davidians died, launching a 51 day, highly publicized siege of the compound by the FBI, ATF, and other elements of federal law enforcement. The incident ended when then Attorney General Janet Reno ordered the authorities to flush the remaining members of the organization from the compound using tear gas pumped from an armored vehicle that had punctured the wall of the building using a battering ram. Shortly after, a fire was started within the compound that quickly consumed the building and the people still inside. In total, 76 people died in the blaze, including David Koresh. Because the incident was featured prominently on national television, Waco became strongly associated with the events of

³⁴ Holley, J. (2015, May 09). Waco only now recovering from the big tornado of '53. Retrieved from <https://www.houstonchronicle.com/news/columnists/native-texan/article/Waco-only-now-recovering-from-the-big-tornado-of-6251845.php>

³⁵ N., R. (2010, June 15). WACO, TX. Retrieved from <https://tshaonline.org/handbook/online/articles/hdw01>

³⁶ N., R. (2010, June 15). WACO, TX. Retrieved from <https://tshaonline.org/handbook/online/articles/hdw01>

the standoff. The events of the siege made the city of Waco even more notorious as the site of the disaster due to its invocation by domestic terrorists Timothy McVeigh and Terry Nichols as a primary motive for the Oklahoma City bombing two years later. Since the events of 1993, multiple documentaries have focused on the events of the siege and the handling of the standoff by the federal government, often including Waco in the titles of the films and thereby continuing the association between the city and the tragedy of the siege.

The New Millennium to the Present Day: 2000 – 2019

The election of former Texas governor George W. Bush to the presidency in 2000 was a major milestone in both Texan and national politics. This development was significant to Waco given its proximity to Bush's Prairie Chapel Ranch in Crawford, Texas, which became known throughout his presidency as the 'Western White House'. The ranch, roughly 25 miles southwest of Waco, was commonly used by Bush during his presidency as a retreat and vacation destination, as well as a meeting place for visits by foreign dignitaries including Vladimir Putin, Tony Blair, Angela Merkel. The proximity of the ranch to Waco brought consistent attention to the city throughout Bush's presidency, as Air Force One used TSTC Waco Airport, formerly known as Connally Air Force Base, to land and take off during Bush's visits. The city also hosted the White House Press Center during such visits, which provided briefing and office facilities for the press corps.³⁷ George W. Bush's service as president brought Waco into the national spotlight once again throughout his two terms.

Waco achieved prominence again in 2009 when the Waco Mammoth Site was opened to the public. The project had been under development since 1978, when two men discovered the

³⁷ N., R. (2010, June 15). WACO, TX. Retrieved from <https://tshaonline.org/handbook/online/articles/hdw01>

site while searching for arrowheads and fossils near the Bosque River. Between 1978 and 1990, 16 mammoths were discovered and excavated by archaeologists at the site. The exhibit opened after the completion of a shelter and visitors center and is now administered through a partnership between the City of Waco, Baylor University, and the National Park Service. President Barack Obama used his authority under the Antiquities act to designate the site as a national monument after multiple attempts to do so passed the House of Representatives but failed to pass in the Senate. The site is significant as an archeological site and tourist attraction in Waco due to its prominence as one of the largest single-herd non-death sites in the world.³⁸

In 2014, Baylor University completed a new football stadium, known as McLane Stadium and built on the banks of the Brazos River. The facility hosts Baylor football games as well as concerts and other events throughout the year. The stadium grounds are designed to accommodate tailgating activities during football season, as well as ‘sail-gating’ by boats docked at the marina constructed on the Brazos River as part of the stadium complex. The new stadium, completed at a cost of \$266 million, is one of the first major developments in recent years on the side of the Brazos opposite downtown Waco and the Baylor campus.³⁹ Its presence now serves as a symbol of Baylor University and Waco to traffic crossing the Brazos River on nearby Interstate 35.

Finally, in 2015, Waco was again thrust into the national spotlight as Chip and Joanna Gaines, stars of the HGTV home renovation show “Fixer Upper” gained mass popularity. The couple opened a large complex in downtown Waco on the site of the former Brazos Valley Cotton Oil Company complex. The two 120’ high silos are fixtures of the Waco skyline, and the now-renovated complex serves as the consumer-facing heart of the Gaines’s media enterprise.

³⁸ Blackmon, T., *Waco mammoth site may become national park*, The Baylor Lariat (Waco, Texas), Vol. 105, No. 32, Tuesday, October 25, 2005

³⁹ N., R. (2010, June 15). WACO, TX. Retrieved from <https://tshaonline.org/handbook/online/articles/hdw01>

The site hosts a 12,000 square foot retail store, a food truck park, a garden store, bakery, and lawn area where visitors can relax and socialize. In 2015, the complex's first year of operation, over 1.9 million visitors from across the world came to the Silo's, driving a surge in investment and development in the city's long-neglected downtown core.⁴⁰

⁴⁰ Courtesy of the Waco Convention and Visitors Bureau, Retrieved from: <https://wacoheartoftexas.com/wp-content/uploads/2017/05/Waco-History-2017.pdf>

Chapter Two – Waco Today

Presently, Waco's economy benefits from its central location in the state of Texas and the presence of numerous prominent organizations that are active in a variety of different industries. However, Waco faces significant structural disadvantages as well. This chapter will examine the contributions of these advantages and disadvantages to Waco's economy in the context of its current status.

The city of Waco is uniquely positioned in the state of Texas at the center of the most economically active part of the state. Located 90 miles from both Austin and the Dallas-Fort Worth metroplex, 180 miles from Houston, and 185 miles from San Antonio, Waco is surrounded by some of the most productive and rapidly-growing regions in the country. According to information compiled by the Greater Waco Chamber of Commerce⁴¹, the city itself sits on roughly 105 square miles of land in McLennan county. Geographically, the city stands on the grand prairie where the Blackland Prairie meets the Balcones Fault Zone. Based on the 2017 Census estimate, the city itself has a population of 136,436. The total labor force in the larger Waco Metropolitan Statistical Area (referred to as Waco MSA henceforth), which includes McLennan and Fall counties in Central Texas and is anchored by the city of Waco, is estimated at 125,477 and possesses an unemployment rate of 3.4% as of September 2018. The city has robust public services, including 14 fire stations manned by 109 firefighters, a 247-person police force, and a county sheriff's department of 378 total employees. The city is located on the shores of Lake Waco, which is a hub of recreational activity as well as the city's primary source of fresh water. The region's primary school education infrastructure is comprised of 20 public

⁴¹ Customized Reports, "Waco at a Glance". (n.d.). Retrieved from <http://wacochamber.com/customized-reports/>

school districts, including Waco Independent School District (Waco ISD), Midway ISD, China Spring ISD, Bosqueville ISD, Connally ISD, and La Vega ISD. Midway ISD is ranked highly compared to other school districts in Texas, which is a boon for Waco's reputation and a magnet for families seeking high-quality public education for their children. In regard to secondary education, the city is served by Baylor University, McLennan Community College, and Texas State Technical College, which combined enroll roughly 30,000 students. Waco also boasts a high quality of life⁴². According to the Greater Waco Chamber of Commerce, the city offers "no traffic, central location, vibrant community spirit, and excellent quality of life," to its residents. The city hosts the 416-acre Cameron Park, which serves as a destination for outdoorsmen all over the world due to its celebrated trail systems, which wind through wooded hills, between limestone bluffs, and along the banks of the rivers adjacent to the park.

In addition, the Chamber emphasizes that Waco is a place where your money goes further, due to its cost of living index of 91.2%, compared with the US benchmark of 100%. The average cost of a new home in 2017 was \$194,383, the median was \$167,700, and average monthly apartment rent is \$1,095 according to American FactFinder from the US Census Bureau and the ACCRA Cost of Living Index. A more granular breakdown of the city's cost of living index indicates that nearly all aspects of life in Waco are significantly cheaper than the national benchmark, with the exception of Healthcare (which is equivalent to the benchmark) and Utilities (which is indexed at 102.4%). In short, Waco is extremely affordable by these metrics when compared to other cities in the United States, despite its high quality of life and its location within 90 miles of both Dallas and Austin.

⁴² Customized Reports, "Quality of Life". (n.d.). Retrieved from <http://wacochamber.com/customized-reports/>

Demographics

Demographics and demographic trends underpin the strength of Waco's economy. Data obtained from the Greater Waco Chamber of Commerce yields important insight into the quality and power of Waco's workforce. Data about the Waco MSA offers insight into the composition of Waco's workforce⁴³. In 2017, the greater Waco area had an estimated population of 267,554 people. Of that total population, 77.2% identified themselves as Caucasian, 15.3% as African American, and 26.1% as Hispanic versus 73.9% as Non-Hispanic. These three categories (Caucasian, African American, and Hispanic) comprise the three largest ethnic groups in the region. Information about the age profile of Waco's population is included in the figure below:

Population by Age, Waco MSA	2012	2013	2014	2015	2016	2017
Under 5 years	7.0%	6.8%	7.0%	7.0%	6.9%	7.0%
5 to 9 years	6.7%	7.4%	6.9%	6.8%	6.7%	6.8%
10 to 14 years	7.0%	6.3%	6.7%	6.3%	6.8%	6.4%
15 to 19 years	8.2%	8.3%	8.6%	8.3%	8.8%	8.1%
20 to 24 years	10.6%	10.6%	10.0%	10.3%	9.9%	10.2%
25 to 34 years	12.7%	12.8%	12.6%	12.6%	12.8%	13.2%
35 to 44 years	11.2%	11.1%	11.2%	11.7%	11.0%	11.4%
45 to 54 years	12.5%	12.1%	12.4%	11.4%	11.6%	11.0%
55 to 59 years	6.2%	6.1%	6.3%	5.9%	6.0%	5.7%
60 to 64 years	5.0%	5.2%	5.0%	5.6%	5.3%	5.8%
65 years and over	13.0%	13.3%	13.4%	14.3%	14.0%	14.5%
Median Age (years)	33.2	33.4	33.5	34.1	33.6	33.9

These communities have a median age of 33.9 years, with 14.5% of the population living at or above the retirement age of 65. The percentage of the population above 65 years of age has steadily increased since 2012, when this age group comprised just 13% of the population. This trend is likely to continue in the future as the population ages and an increasing number of

⁴³ Customized Reports, "Population & Demographics". (n.d.). Retrieved from <http://wacochamber.com/customized-reports/>

people in the ‘Baby Boomer’ generation enter retirement. In contrast, the percentage of the population between ages 20 and 34 years of age has fluctuated over that same period, ranging from 22.9% of the population in 2014 to 23.4% in 2017. The distinct trend in the number of people entering retirement age in the Waco MSA does not appear to be matched by a corresponding trend in the number of young professionals entering the workforce, which could indicate a structural demographic change that may hamper the economic growth of the region over the long term.

Educational attainment in the Waco MSA is a critical metric of the strength of Waco’s workforce⁴⁴. As the world becomes more sophisticated and interconnected, it is important for workers to have a strong foundational education in order to maintain their viability in an increasingly competitive economy. The figures below illustrate statistics regarding educational attainment for the Waco MSA and for Texas:

Total Educational Attainment, Waco MSA	2015	2016	2017
Less than 9th grade	5.6%	7.3%	7.4%
9th to 12th grade, no diploma	9.9%	10.7%	9.6%
High school graduate (incl. equivalency)	29.6%	29.5%	26.2%
Some college, no degree	22.3%	22.3%	23.2%
Associate's degree	10.1%	9.1%	9.6%
Bachelor's degree	14.6%	13.2%	16.2%
Graduate or professional degree	7.9%	7.9%	7.9%
Population 25 years and over	161,027	161,073	164,750

Total Educational Attainment, Texas	2015	2016	2017
Less than 9th grade	8.9%	8.6%	8.1%
9th to 12th grade, no diploma	8.7%	8.5%	8.2%
High school graduate (incl. equivalency)	25.3%	25.2%	25.1%
Some college, no degree	21.8%	21.8%	21.7%
Associate's degree	6.9%	7.1%	7.3%

⁴⁴ Customized Reports, “Population & Demographics”. (n.d.). Retrieved from <http://wacochamber.com/customized-reports/>

Bachelor's degree	18.7%	18.9%	19.3%
Graduate or professional degree	9.7%	10.0%	10.3%
Population 25 years and over	17,472,861	17,775,280	18,149,346

The Waco MSA currently has a troubling educational attainment profile when compared with Texas as a whole. In 2017, the Greater Waco Chamber of Commerce reported that the percentage of the Waco MSA population above the age of 25 without a high school diploma was 17%, while Texas's was 16.3%. The percentage of people in the Waco MSA with at least a bachelor's degree was 24.1% in 2017, compared with 29.6% in Texas overall. These statistics indicate that a relatively large portion of Waco's workforce is at an educational disadvantage, while a relatively small percentage of the workforce has a college degree or an advanced graduate degree. In addition, between 2015 and 2017 there appears to be a downward trend in the percentage of Texans without a high school diploma. In the Waco MSA, that trend did not materialize; in fact, the situation seems to have worsened. Between 2015 and 2017, Waco's percentage of the workforce without a high school degree experienced an average annual growth rate of 3.13% compared to Texas's -2.53%. However, the average annual growth rate over the same period of the percentage of Waco's workforce with a bachelor's degree or higher was 2.32% compared to Texas's 1.39%. To summarize, Waco's undereducated portion of the workforce is growing while Texas's is declining, and its highly-educated portion of the workforce is growing at a faster rate than that of Texas.

Median household income is an important indicator of both quality of life and economic strength. Median household income is the amount that divides the household income distribution into two equal groups, with half having income above that amount and half having income below that amount. The figure below depicts information regarding median household income for the

United States, for Texas, and for the Waco Region⁴⁵. The Waco MSA is comprised of McLennan and Falls counties:

Median Household Income	2012	2013	2014	2015	2016
United States	\$51,371	\$52,250	\$53,657	\$55,775	\$57,617
<i>% Change from Year Ago</i>	<i>1.72%</i>	<i>1.71%</i>	<i>2.69%</i>	<i>3.95%</i>	<i>3.30%</i>
Texas	\$50,747	\$51,714	\$53,067	\$55,668	\$56,583
<i>% Change from Year Ago</i>	<i>2.75%</i>	<i>1.91%</i>	<i>2.62%</i>	<i>4.90%</i>	<i>1.64%</i>
Region	\$40,662	\$42,211	\$42,888	\$44,544	\$45,956
<i>% Change from Year Ago</i>	<i>-0.05%</i>	<i>3.81%</i>	<i>1.60%</i>	<i>3.86%</i>	<i>3.17%</i>
Bell County, TX	\$48,391	\$50,223	\$51,048	\$48,894	\$51,993
Bosque County, TX	\$40,763	\$42,864	\$44,397	\$47,135	\$47,636
Coryell County, TX	\$46,132	\$50,161	\$47,018	\$45,989	\$50,122
Falls County, TX	\$34,388	\$34,376	\$35,491	\$37,912	\$38,559
Hill County, TX	\$37,610	\$40,253	\$41,521	\$44,965	\$47,338
Limestone County, TX	\$36,496	\$36,537	\$37,256	\$40,655	\$39,382
McLennan County, TX	\$40,855	\$41,066	\$43,488	\$46,264	\$46,662

** Region includes the following counties: Bell, Bosque, Coryell, Falls, Hill, Limestone and McLennan*

In 2016, Texas had a median household income of \$56,583 while that of the greater Central Texas region (which includes Bell, Bosque, Coryell, Falls, Hill, Limestone, and McLennan counties) was \$45,956. The Waco MSA median household income was \$47,000. From 2015 to 2017, median household income grew at an average annual rate in Texas, the greater Central Texas region, and the Waco MSA of 2.20%, 2.48%, and 3.68%, respectively. This is a positive indicator of the health of Waco's economy, as household incomes appear to be rising at a faster rate than those of the larger region or the state as a whole. It seems that, despite troubling trends regarding the education of the workforce and long-term health of the economy, residents of Waco have been doing relatively well financially over the last few years. However, members of the lower socioeconomic classes in Waco are significantly more disadvantaged than

⁴⁵ Customized Reports, "Household Income". (n.d.). Retrieved from <http://wacochamber.com/customized-reports/>

those in other parts of Texas. In the city of Waco itself, 26.8% of people are below the poverty line, according to the US Census Bureau, compared to 14.6% of Texans who are below the poverty line.

Key Industries and Employers

The economy of greater Waco is diversified and is not dominated by any single industry. The Greater Waco Chamber of Commerce reported that, as of October 2018, the Waco MSA's five largest industries by employment were education & health services, trade transportation & utilities, government, manufacturing, and retail trade. In comparison, Texas's top five were trade transportation & utilities, government, professional & business services, education & health services, and leisure & hospitality. The figures included below depict the employment contributions of each industry for the Waco MSA and for the state of Texas⁴⁶:

Waco MSA Employment	Oct 2018	% Of Total Nonfarm
Total Nonfarm	122.4	
Total Private	102.9	84.1%
Service-Providing	98.4	80.4%
Private Service Providing	78.9	64.5%
Goods Producing	24	19.6%
Education & Health Services	21.5	17.6%
Trade, Transportation & Utilities	21.3	17.4%
Government	19.5	15.9%
Manufacturing	16.6	13.6%
Retail Trade	12.9	10.5%
Leisure & Hospitality	12.2	10.0%
Professional & Business Services	11.4	9.3%
Financial Activities	7.9	6.5%
Mining, Logging & Construction	7.4	6.0%

⁴⁶ Customized Reports, "Employment by Industry". (n.d.). Retrieved from <http://wacochamber.com/customized-reports/>

Wholesale Trade	5	4.1%
Other Services	3.7	3.0%
Transportation & Utilities	3.4	2.8%
Information	0.9	0.7%
<i>*In thousands</i>		

Texas Employment	Oct 2018	% Of Total Nonfarm
Total Nonfarm	12,738.70	
Service-Providing	10,806.20	84.8%
Total Private	10,779.90	84.6%
Private Service Providing	8,847.40	69.5%
Goods Producing	1,932.50	15.2%
Trade, Transportation & Utilities	2,544.00	20.0%
Government	1,958.80	15.4%
Professional & Business Services	1,772.80	13.9%
Education & Health Services	1,727.40	13.6%
Leisure & Hospitality	1,376.60	10.8%
Retail Trade	1,350.60	10.6%
Manufacturing	884.4	6.9%
Financial Activities	789.5	6.2%
Construction	779.9	6.1%
Wholesale Trade	622.4	4.9%
Transportation & Utilities	571	4.5%
Durable Goods	568.4	4.5%
Other Services	441.8	3.5%
Non-Durable Goods	316	2.5%
Mining & Logging	268.2	2.1%
Information	195.3	1.5%
Utilities	50.8	0.4%
<i>*In thousands</i>		

The Waco MSA reported that 64.5% of Waco's nonfarm employment is derived from private service-providing firms and 19.6% from goods-producing firms. Waco employs a higher percentage of people in goods-producing industries than Texas at large, which only employs 15.2% of workers in those industries.

Prominent organizations in these industries are primary drivers of Waco's economy. The largest single employer in the Waco MSA is Baylor University, followed by Waco Independent School District, Providence Healthcare Network, Baylor Scott & White's Hillcrest hospital, H-E-B, the City of Waco, and L3 Technologies. Education, healthcare, consumer retail, and aerospace are some of the most active areas of the Waco MSA economy, with aerospace being the most advanced and high-profile industry that employs residents of the Waco area. In addition to L3 Technologies, Elon Musk's Space Exploration Technologies (known more commonly as Space Ex) has a significant presence in McGregor, Texas where it tests the rocket engines that the firm develops. Such companies attract highly educated and well-paid employees to the Waco area, thereby adding a great deal of value to both the community and the economy. Baylor University is another example of a talent magnet that enhances the quality of Waco's workforce. As a well-regarded research institution and university that employs close to three thousand people, Baylor attracts national attention as well as highly-educated professors, scientists, and students. The university forms a core part of the Waco community and its activities such as sporting events, concerts, and other expositions bring visitors and local residents together on its campus. Additionally, both Providence Healthcare Network and Baylor Scott & White bring healthcare professionals such as doctors, technicians, nurses, and other caregivers to Waco. They also serve the needs of much of the surrounding area, as smaller rural towns lack the advanced technology and expansive capabilities possessed by these large healthcare institutions. They therefore generate a significant amount of economic activity for the city and help entice people to move to Waco in order to access the high-quality services they offer their patients.

The benefits to Waco provided by firms involved with advanced industries such as technology, aerospace, and healthcare extend far beyond the products or services they offer their

customers. Doctors, engineers, lawyers, financiers, and other highly productive members of the labor force earn high salaries, but they also tend to be involved in the community and spend money at restaurants, retail stores, concert venues, and other cultural institutions. These people are highly-paid, well-educated, and most importantly, they are fairly mobile. These professionals have the ability to choose where they live. Cities of all types and sizes are inclined to do whatever is necessary to attract these kinds of people to their neighborhoods and markets in order to fuel growth and enrich the community.

Chapter Three – The Creative Class and the Framework of Urban Prosperity

Mayors, city councilmen, businessmen, economists, and politicians at all levels of society today are concerned with and focused on economic growth. In the news, journalists describe the extraordinary efforts that policymakers will exert in an effort to attract a prominent company that is perceived to be a driver of innovation and success to colonize a city or region. During the advent of the computer revolution and the information age, Silicon Valley was the hub of technological innovation that changed the way humanity communicated and interacted with one another and with information. Somehow, technologists, entrepreneurs, and other high-achieving workers were attracted to the same area and duly sparked a fountain of inventions, startups, and cultural change that would sweep across America and then the world. Silicon Valley is just one example of this phenomenon: the transformation of a sleepy California suburb into one of the most important economic centers in the country, if not the world. A similar story occurred in Texas as well; Austin was once known as the small, hippy-filled college town that also happened to be the capital of the state of Texas. This city, just an hour-and-a-half drive south from Waco, underwent a transformation that resulted in what many refer to as the ‘Silicon Hills.’ The once quiet town now hosts headquarters and major campuses of some of the most innovative technology companies to emerge from Silicon Valley, a thriving entrepreneurial ecosystem, and a world-famous music and cultural scene that is showcased each year during the SXSW Festival. To the leaders of urban regions across the country, understanding how transformations such as the one that drove Austin into twenty-first century dominance is of critical importance, especially in relation to how they can stimulate that same growth in their own hometowns.

In order to understand where Waco stands today and how its economy may develop in the future, this chapter will describe a framework of urban prosperity that has grown in

prominence and acceptance as the phenomena that it predicts have unfolded since it was first published in the year 2000. This framework was developed by Richard Florida, the Director of the Martin Prosperity Institute at the University of Toronto's Rotman School of Management and Global Research Professor at New York University. Dr. Florida is also a senior editor for *The Atlantic*, co-founder and Editor-at-Large of *Atlantic Cities*, and founder of the Creative Class Group. He is best known for his theory of urban development – the concepts of the Creative Class and the Creative Economy – around which this chapter will center its discussion.

Creativity

In the early industrial economy, the principal driver of economic success was proximity to natural resources, such as coal and iron ore deposits, labor, and food to feed those laborers. Raw materials to use as inputs in the production of manufactured goods drove the tide of European imperialism across the world in search of such raw materials. In fact, much of Waco's cotton production throughout the antebellum period and even after the civil war made its way to industrial textile factories in the major urban centers of the day, including New York and London. However, just as access to those basic economic resources fueled the onset of the industrial revolution, the modern American economy is driven by human creativity.⁴⁷ Florida remarks in the first chapter of *The Rise of the Creative Class, Revisited* that, "Access to talented and creative people is to modern business what access to coal and iron ore was to steelmaking. It determines where companies will choose to locate and grow, and this in turn changes the ways that cities must compete."⁴⁸ This quote is the central theme of Florida's thesis, and is what

⁴⁷ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp.

⁴⁸ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 8

policymakers ought to remember when thinking about the development of the communities that they lead.

Creativity can mean many things, but in the context of this discussion, creativity refers generally to the, “act of bringing something useful, that works, and is non-obvious into the world,” according to Dean Keith Simonton.⁴⁹ When creativity is harnessed in an economic context, creativity drives steady and incremental improvements in products and processes that enable them to remain viable, just as much as it does their original invention.⁵⁰ Under this application of the word, creativity refers not only to the ability to invent something new, but the ability to think about existing products, processes, and ideas in new and innovative ways. Organizations, countries, and cities that foster environments that support the exercise and expression of creativity are the ones that thrive in the new post-industrial economy of modern-day America. Dr. Florida, in measuring and tracking economic shifts, remarks that, “our economy is moving from an older corporate-centered system defined by large companies to a more people-driven one,” meaning that larger concentrations of people who can and do unleash their creative energies drive larger and faster economic gains in the environments where they live.⁵¹ A classic example of how a set of values or social shift can lead to economic consequences is espoused by Max Weber, who famously tied the ‘Protestant work ethic’ and its underlying spirit of thrift, hard work, and efficiency to the rise of early capitalism. Similarly, a shared commitment among a community to the creative spirit in all its manifestations now underpins the new “creative ethos” that fuels our modern economy.⁵² In short, the ultimate source of creativity is people, and they are the vital resource of the new age.

⁴⁹ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 6

⁵⁰ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 6

⁵¹ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 7

⁵² Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 6

The Creative Class

The rise of the so-called ‘creative class’ is underpinned by the centrality of human creativity to the new post-industrial economic engine, as discussed in the preceding section. Roughly 40 million Americans belonged to the creative class in 2014, or approximately one-third of all employed people in the country.⁵³ Within the creative class, there exists a central group of highly creative workers, in the previously mentioned sense of the word, whose primary purpose in their work is to generate new ways of thinking, new ideas, new products, or other such innovations that benefit society. Members of this core group of creatives include those who work as scientists, engineers, academia, artists, musicians, and entertainment. Around this ultra-creative core, the creative class includes a broader group of ‘creative professionals’ whose primary economic function is to engage in complex problem solving that requires a high level of education and a significant amount of independent judgement. People in this concentration of human capital often work in professions such as business, finance, law, health care, and other fields that require a similar skillset.⁵⁴ Clearly, members of the creative class encompass a vast range of professions, have concentrations in a wide variety of subjects, and likely earn a broad range of income. For these reasons, it can be difficult to make clear definitions regarding the boundaries of the creative class. However, although they vary widely in many other characteristics, members of the creative class share a common ethos that values creativity, diversity, individuality, and merit.⁵⁵

National Class Structure

⁵³ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 8

⁵⁴ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 8

⁵⁵ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 8-9

In order to explore the significance of the creative class in today's society, it is important to understand how the creative class fits into the broader class structure of modern society. Members of the service class and working class are typically employed to perform routine, often physical work. In contrast, members of the creative class are paid to use their minds to a high degree of their cognitive and social capabilities.⁵⁶

The overall class structure of the United States and other developed nations has been the subject of controversy since it began to industrialize. In the 19th and 20th centuries, the central ideological battle in western society was centered on the rise, and then the decline, of the working class. The traditional working class has approximately 26 million members in the United States and consists of workers in manufacturing, cargo and passenger transportation, maintenance, and construction. The working class share of the workforce surpassed that of agriculture around 1830, and continued to climb steadily, reaching 60 percent of the nation's workforce by 1870. America remained a majority working class nation until the 1950's and the working class share of the workforce remained above 40 percent into the 1970s. It has declined ever since, hitting 31 percent of the workforce in 1990 before declining to 21 percent by 2010. The share of the workforce engaged in direct production has declined even more, to just 6 percent.⁵⁷

In the second half of the 20th century, the focus shifted to the rise of a post-industrial society driven by a service- and knowledge-driven economy rather than an industrial one.⁵⁸ The service class is the largest class in America today, with some 60 million members, more than 45 percent of the entire US workforce. It includes professions such as nurses, secretaries, and food service workers. Interestingly, the service class has grown alongside the creative class in areas that have

⁵⁶ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 9

⁵⁷ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 48

⁵⁸ Bell, D. (1976). *The coming of post-industrial society*. New York: Basic Books.

seen a large rise in the concentration of creative industry. The growth of the service class is a response to the demands of the creative economy. As the economy has become more specialized and the occupational division of labor has deepened, the creative class has increasingly outsourced functions that were previously provided within the family to the service class.⁵⁹ Today, the creative class is still smaller than the service class, but its economic power makes it the most influential. Members of the creative class are dominant in terms of both wealth and income. They earn double what members of the other two classes earn on average.⁶⁰ Members of the service class earn average annual salaries of barely more than \$30,000, about 40 percent of what the creative class earns. Although the service class comprises over 45 percent of the US labor pool, its members account for only one-third of all earned income. In 2010, the working class averaged \$34,015 in annual wages, 52% of what members of the creative class earn.⁶¹

The Creative Class and Economic Health

Although the differences in earning potential between the creative class and the other two classes are stark, creative competence is becoming increasingly important in jobs that would normally fall squarely into the service or working classes, especially when these jobs are present alongside concentrations of members of the creative class.⁶² As this trend continues, and “as the relevant body of knowledge becomes more complex and workers are more valued for their ingenuity in applying it, some now in the working class or service class may move into the creative class.”⁶³ However, this is no indication that any significant portion of these workers will have the resources or skills required to fully join the creative class, as the natures of many of

⁵⁹ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 47

⁶⁰ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 9-10

⁶¹ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 47-48

⁶² Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 48

⁶³ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 48

these jobs constrain creativity and require workers to focus on the tasks required of the job.

Since our economy cannot realize its full potential when it employs the creative energies of one-third of its labor pool, it is critical for community leaders, economic stakeholders, and policymakers to explore ways to fully engage the creative talents of the other two thirds.

Richard Florida describes a fertile neighborhood environment that is conducive to the attraction and growth of a creative class population, which is actually based on the Hudson Street neighborhood in New York City, as having several key characteristics. This neighborhood has short blocks that spawn a variety of pedestrian traffic. It has a deep diversity of people, from many socioeconomic circumstances. Broad sidewalks and an assortment of different kinds of buildings, ranging from apartments and stores to small factories. The multi-use nature of the neighborhood means that there are different kinds of people mingling and interacting with one another outside at all times throughout the day. The presence of older, underutilized buildings makes this neighborhood ideal for the generation of creative and entrepreneurial organizations, as they can start up in relatively low-cost office spaces and lofts. These can include artists' studios and music venues, as well as small entrepreneurial businesses. This neighborhood also fosters an environment that empowers 'public characters,' including shopkeepers, merchants, and other kinds of neighborhood leaders, whose positions at the nexuses of neighborhood social networks allows them to nurture relationships among people and spread ideas among people who frequent the neighborhood. These neighborhood figures play critical roles in resource mobilization and connecting members of every class. The layout and composition of this idealized yet realistic urban community promotes and accelerates these connections.⁶⁴

Having a concentration of the creative class within communities is correlated with positive regional economic outcomes. Three of the creative class professional categories –

⁶⁴ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 28

technology, business professionals, and arts and cultural workers – add considerably to regional economic output and wages.⁶⁵ Artistic and cultural occupations in particular are significantly associated with regional wages. A common assumption is that art follows wealth, which would lead artists and creatives to richer cities and regions which wield more disposable income to patronize the arts, thereby increasing the concentration of artists in that region or city. While that may have been the case in the past, today it appears to work both ways. Arts, design, and entertainment occupations are among the most important contributors to regional income and wealth.⁶⁶ While these sorts of occupations may not be captured in traditional measures of human capital, which is usually based on educational attainment, they are captured in measurements of the creative class. It is important to note that human capital relates more strongly to income, and the creative class relates more strongly to wages. This is a critical difference, as wages are a better gauge not just of wealth, which can be imported from elsewhere by the migration of affluence, but of the productivity of a region. Human capital may reflect richer places, but it seems the creative class actually makes a place more productive.⁶⁷

In addition to the association of concentrations of the creative class with wages and wealth, the diversity of that concentration across industries and professions is associated with higher wages among the population of creative workers in the region. Economist Todd Gabe found evidence that the wage premium earned by creative class workers above the national average increased as the percentage of creative class membership in a region increased. More importantly however, Gabe's study found that members of the creative class earn higher wages in cities with a diverse set of creative class occupations. When a region large numbers of artists, technological professionals, and large populations of workers in complex management and

⁶⁵ Florida, R., Mellander, C., & Stolarick, K. (2008). Inside the black box of regional development--human capital, the creative class and tolerance. *Journal of Economic Geography*, 8(5), 615-649. doi:10.1093/jeg/lbn023

⁶⁶ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 216

⁶⁷ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 265

business, all members of that region's creative class do better. This finding indicates interaction among different types of Creative Class work generates better knowledge spillovers, higher rates of innovation, and thus higher wages.⁶⁸ The key takeaway from this finding is that cities must focus on attracting more than one type of creative professional in order to maximize the benefits gained from their presence. Overall appeal to the creative class is much more effective in terms of urban prosperity than artificially subsidizing a specific industry or company in order to drive long-term growth.

Perhaps the most interesting way that having a concentration of creative workers in a region is how it affects the overall economic resilience of a region for all classes. Research conducted by economists Kevin Stolarick and Elizabeth Currid-Halkett on changes in unemployment rates across the country during the financial crisis of 2008 based on the class structure of each region suggest that a higher concentration of the creative class relative to the working and service class helped lessen the effects of the crisis on the regional economy. In fact, according to their research, the class variables alone explained between 30% and 57% of the variation in regional unemployment rates during the financial crisis and resultant recession. Cities with a larger share of the creative class experienced slower increases in unemployment as the crisis began, and the effects were even more muted as joblessness was expanding across the rest of the country. Such regions hit a lower peak unemployment rate during the crisis, and then rebounded more rapidly once the economy began its recovery.⁶⁹ Having a large creative class presence in a region lowered the impact of the financial crisis, especially in terms of unemployment, primarily because such regions are more economically vibrant and resilient across the board. According to a related study conducted by Stolarick and Currid-Halkett regarding the recession, "at the peak, a 1% increase in the creative class and a 1% decrease in the

⁶⁸ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 217

⁶⁹ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 51-52

working class, *ceteris paribus*, are associated with an unemployment rate that is 5.7% lower. Increasing the creative class by 1% and lowering the service class by 1%, *ceteris paribus*, would reduce unemployment by 7.1%. Increasing the working class by 1% and a decrease in the service class of 1%, *ceteris paribus*, would increase unemployment by 1.4%. The overall impact indicates that a higher share of creative workers is associated with lower unemployment, from the expansion of the crisis through the current day.”⁷⁰ This phenomenon reflects an economic resilience that is present in these regions, during times of both economic crisis and economic growth. An important note, however, is that those in the creative class who did end up unemployed were better equipped with both the skills and means to switch jobs or even careers when necessary. This is typically not an option commonly available to the working class and service class, which often rely on specific low-skill industries that suffer greatly during times of economic hardship.⁷¹ However, the effects of the presence of the creative class on the aggregate regional economy clearly indicate that they provide economic stability and vitality to other classes within regional economies, despite the disparity in income and wealth between the creative class and the working and service classes.

Where does the Creative Class live?

Today, the creative class is flocking back from outlying, exurban areas to centers of urban areas and near-urban, walkable suburbs adjacent to the densest parts of the cities.⁷² This trend is driving the revitalization of formerly dilapidated inner-city districts that had long ago been left to crumble by the suburbanization of mid-century America. As of 2014, the creative

⁷⁰ Stolarick, K., & Currid-Halkett, E. (2013). Creativity and the crisis: The impact of creative workers on regional unemployment. *Cities*, 33, 5-14. doi:10.1016/j.cities.2012.05.017

⁷¹ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 54

⁷² Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 11

class comprises more than 40% of the labor force in large metropolitan areas such as San Jose, California; greater Washington DC; and Boston, Massachusetts, as well as smaller educational centers and college towns such as Durham, North Carolina; Ithaca New York; Boulder, Colorado; and Ann Arbor, Michigan.⁷³ In Texas, several of the largest metropolitan areas are undergoing a similar change. Austin is growing at a rapid rate due to the heavy concentration and expansion of its technology industry as well as its cultural prominence, and both Houston and Dallas continue to be national centers of commerce and innovation. Waco is situated in a central location between each of these three prominent metropolitan areas along the Interstate 35 corridor. Waco's class breakdown is heavily weighted toward the service class, and it ranks 178th across all U.S. metro areas in share of creative class employment in its labor force. The Working class includes 25.1%, the Service class includes 45.6%, and the creative class includes 29.2% of the workforce. The following breakdown⁷⁴ compares Waco's class structure in 2014 with other Texas metropolitan areas:

Metropolitan Area	Creative	Working	Service
Austin-Round Rock	34.4%	16.5%	49.0%
Dallas-Fort Worth-Arlington	34.3%	21.5%	44.2%
Houston-Bay Town-Sugar Land	33.0%	24.4%	42.5%
San Antonio	31.2%	18.6%	50.1%
Killeen-Temple-Ft. Hood	30.9%	19.2%	49.9%
Waco	29.2%	25.1%	45.6%

It is clear that the creative class is highly concentrated in the largest metropolitan areas of Austin, Dallas, Houston, and San Antonio. Waco possesses the highest percentage of working class and

⁷³ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 11

⁷⁴ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. Table A.1

the third highest percentage of service class in this breakdown and the lowest percentage of creative class. The prosperity of the top Texas metropolitan areas is not surprising given the human capital and labor composition that underpins their economies. Their success aligns with the vitality and robustness that would be expected to accompany large concentrations of the creative class. This illustration of the class structure of greater Central Texas, as well as the significance of the creative class in relation to economic prosperity, accentuates the importance of understanding why certain cities have larger concentrations of one class or another. In order to construct a framework which describes the drivers of urban prosperity, it is crucial to understand why members of the creative class tend to favor some places over others when deciding where to live.

Why do they live there?

Traditionally, most people and even most economists operated under the assumption that people in a free society that allows them to do so move in pursuit of jobs and financial rewards. Although one's career is an influential factor in deciding where to move, jobs are certainly not the sole determinant of where one lives. People balance a myriad of other considerations when deciding where to work, age, and raise a family. A survey conducted by Richard Florida found that, among other factors such as challenge, responsibility, flexibility, peer recognition, and financial compensation, the most important criteria for creative class workers was location and community when asked how they evaluate job selection and satisfaction.⁷⁵ Florida's interview subjects indicated a desire and need to live in places that offer stimulating, creative environments. Many would not even consider taking jobs in certain cities or regions, and some

⁷⁵ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 75

indicated that they used location as their primary criterion in a proactive sense: they picked the place they wanted to live and then focused their job search there.⁷⁶

It is increasingly apparent that creative people do not move for career- or salary-centric reasons as many once thought, nor for other traditional reasons that city planners and political officials often focus on. The physical structures that many cities still focus on building today include gargantuan sports stadiums, urban malls, and tourism districts that often more closely resemble theme parks. These high-cost developments are often irrelevant at best and unattractive at worst to members of the creative class. Instead, today's creatives seek out concentrations of superior amenities and authentic experiences, an openness to diversity of all kinds, and most importantly, the chance to validate themselves as creative people.⁷⁷ The places that are most attractive to members of the creative class do not derive their prosperity from traditional economic advantages such as the control of natural resources or major transportation routes. Nor is prosperity driven by tax incentives enacted to entice businesses into opening an office in the region. True metropolitan and regional success is driven by being a place where creative people want to live.⁷⁸

Under the Creative Class Theory created by Richard Florida, the new model of economic development takes shape around the what he refers to as the "3 T's" of economic development: technology, talent, and tolerance. Each factor is necessary, but by itself insufficient as a condition for prosperity, innovation, or sustainable economic growth. The most successful cities are those that prioritize all three of these factors.⁷⁹ In order to evaluate each of these qualities in a standardized way across metropolitan regions, Florida relies on three composite statistical indices, related to each of the three factors. While the statistical analysis processes undertaken

⁷⁶ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 75-76

⁷⁷ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 185-186

⁷⁸ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 186

⁷⁹ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 11

by Richard Florida underpin the conclusions drawn from his research, a summary of the components of each index will contribute to an understanding of the important characteristics underlying these key characteristics of creative economies.

Florida's Technology Index is a composite of the Millken Institute's Tech-Pole Index, patents per capita, and average annual patent growth. This is his chosen benchmark of a region's technological richness.⁸⁰ Talent is measured by the quantity of creative class workers in a region as a proxy for human capital and economic productivity of a region's residents.⁸¹ Finally, the Tolerance Index used by Florida combines three separate measurements of the composition of a region's population: the Gay Index, the Foreign-Born Index, and the Integration Index.⁸² The combination of the three composite indexes – the Technology Index, Talent measured as the creative class concentration, and the Tolerance Index – forms the Creativity Index, which is Florida's overall measure of regional economic potential. As a combination of the three major indices it is the baseline indicator of a region's current economic vitality and long-run economic potential.⁸³

Most economists usually view technology and talent as static stockpiles of resources, but the reality is that they flow from place to place. As opposed to deposits of minerals or some sort of advantageous geography, talented people are not fixed assets of the cities that they call home at any point in time because they can and do move to where they want to live. The places that are more open, diverse, and tolerant are nearly always better than others at generating, attracting, and holding onto creative talent. For this reason, it is important for places to have low barriers of entry for people, where newcomers are accepted quickly into all sorts of social and economic activities. According to Florida, "all else being equal, they are likely to attract and retain the sorts

⁸⁰ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 229

⁸¹ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 231

⁸² Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 247-249

⁸³ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 253

of people who power innovation and growth.”⁸⁴ Enthusiastic acceptance and inclusion of outsiders, combined with a concentration of bohemians, such as artists and other cultural creatives, and LGBTQI individuals is indicative of a region that is likely to have a high tolerance index measurement. Artists and bohemians produce amenities that are valued by the creative class, and they are also attracted to places that have them. Artists and bohemians are discerning buyers that place great value on amenities, authenticity, and aesthetics. Due to their prioritization of these aspects of a region, they tend to concentrate in places where those things abound. Additionally, regions in which artists and LGBTQI individuals have settled are more likely than others to develop as a community into that is more conducive to advancement and entrepreneurship. Concentrations of these residents are associated with increasing housing values for the same reason they make areas more productive and innovative. They create a feedback loop that attracts increasing numbers of creatives who in turn serve as magnets for others. Measurement of the concentrations of these professions and individuals is therefore useful as a proxy for, or predictor of, a region or neighborhood’s potential as a magnet for the creative class. High measurement results signal that a location has the right characteristics to drive economic vibrancy and growth.⁸⁵ The Tolerance Index is closely associated with multiple positive regional outcomes, including Creative Class share, growth of high-tech industry, higher regional incomes and wages, and a higher level of happiness.⁸⁶

Finally, members of the creative class place great value on the quality of a place. This concept includes several characteristics of a region or city: the built environment, the natural environment, the diversity of people with which one can interact, and the vibrancy and excitement of life in that region. The first two characteristics can be determined by a place’s

⁸⁴ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 233-234

⁸⁵ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 245

⁸⁶ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 249

history, climate, infrastructure, and urban design. They also rely on an area's authenticity. This can flow from several aspects of a place, including the presence of historic buildings, recognized neighborhoods, and general cultural or aesthetic uniqueness. Authenticity of a place's built environment stems from how these various elements mix together to create a sense of significance or individuality.⁸⁷ The third characteristic, the diversity of a place's residents, is determined by how tolerant the place is. It is the key to providing a stimulating and nurturing setting in which people can interact, share ideas, and make new friends easily. The fourth determinant of quality of place, vibrancy and excitement of life there, is derived from the existence of amenities and amenity-producing people. This can include nightlife, café culture, art and music scenes, outdoor recreation, and anything that creative people can productively participate in during their free time. An attractive, high-quality place does not have to be a big city. However, it does have to be a place where anyone can find a group of peers to be comfortable with, people to be stimulated by, and outsiders must quickly be able to become insiders.⁸⁸

⁸⁷ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 294

⁸⁸ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 294

Chapter 4 - The Future of Waco

As of 2019, Waco is not on the same tier as Austin, Dallas-Fort Worth, or Houston in terms of many economic metrics, ranging from size to creative concentration. However, the city is uniquely positioned to capitalize on its existing advantages and build up its strength in other important areas of urban development. This chapter will evaluate Waco's economic potency and potential based on its history, its current situation, and the most important drivers of the growth of post-industrial cities under the framework developed by Richard Florida. Using commentary from the city's chamber of commerce, economic data, and qualitative observations, this analysis will highlight areas of priority for Waco as it seeks to become a growing economic force in the Texas economy. Using Florida's '3 T's' of economic development to evaluate Waco in terms of its competitiveness on the dimensions of talent, tolerance, and technology, this chapter will determine how well Waco is positioned to grow its economy in the near future and examine ways that Waco can maximize its growth potential as a factor of each of the three T's.

Talent

First it is important to recognize that having more people in a metropolitan region or adding them at a faster rate might embolden city leaders and residents, but population growth itself is a misleading standard by which to evaluate a regions' economic growth. While population growth can be a symptom of a healthy, growing economy, it is not the driving force behind such trends. Real economic growth comes from heightened productivity in a region, and heightened productivity depends on the quality of a place's human capital. Recognizing the distinction between population growth and economic growth is important, as city leaders often pursue

developmental strategies dedicated to increasing this metric as an end in itself. A rising population can produce a false illusion of prosperity.⁸⁹

Cities need to be attractive to people as much or more than they need to be attractive to businesses. The construction of a people climate refers to a general strategy aimed at attracting and retaining people, especially but not limited to creative people. The benefits of this kind of strategy are obvious. However, there is no clear-cut, generally applicable formula for a robust people climate. It cannot be homogenous or static due to the diverse nature of the creative class. The construction of a creative community is in fact an organic process, one that cannot be easily controlled in any top-down fashion. It's a matter of providing the right conditions, planting the right seeds, and then letting things take their course.⁹⁰

In Waco's case, this process has been exemplified by the explosion in popularity of the HGTV show *Fixer Upper*, starring Waco natives Chip and Joanna Gaines. The reality TV show is set in Waco and is centered around home design and renovation. Prior to the show, which first aired in May 2013, Chip and Joanna Gaines worked with members of the community on buying and remodeling homes. The couple has worked on more than 100 homes in the Waco area. In each episode of the show, the clients, usually couples, are shown three potential homes around the Waco area that they can select as their new residence. Each option requires varying amounts of renovation and new construction, and clients typically have an overall budget of \$200,000 or less overall, including at least \$30,000 earmarked for renovations of the property. Joanna serves as the designer of each project and Chip serves as the general contractor, completing most of the actual construction and renovation work.

Since the show first aired, a devoted fanbase has coalesced around the personalities of Chip and Joanna. The show often showcases their relationship as a couple and their family life. The

⁸⁹ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 259

⁹⁰ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 305

couple often teases one another as they work together on projects, and the general impression depicted by the show appears to be a candid glimpse of an idealized happy couple. Each episode features largely positive reactions from clients after the unveiling of their new home, and the overall search process features many neighborhoods throughout Waco in an aesthetically pleasing way. The show and its association with Waco have profoundly shaped the city's image in national consciousness since it first aired. According to Loren Schwartz, chairperson of the Greater Waco Chamber of Commerce, in an April 2019 interview for the *Wacoan* Magazine, "obviously, the Magnolia Effect, as it's been dubbed, is tremendous because the visitorship has put Waco in a category where people want to visit versus, 'Oh yeah. I heard something about Waco,' and maybe there were some negative connotations to that."⁹¹ A few weeks before the publication of the interview, Jennifer Lopez and Ellen DeGeneres were talking about Waco and Chip and Joanna on Ellen's show, further highlighting the extent of the popularity and attention garnered by *Fixer Upper* for Waco. Reacting to the spotlight, Schwartz commented on the change in attitude among Wacoans over the past few years, calling it "tremendous." She said that Wacoans, "stand up straighter when people say, 'Oh, you're from Waco,' and they have a smile on their face." Waco's brighter public image and burgeoning national prominence as a leader in design and architecture based on the aesthetic sense of Joanna Gaines, now referred to as 'rustic-chic,' is making Waco a magnet for types of people who may never have considered moving to or staying in Waco. According to Schwartz, "young people are interested in staying in Waco. We're keeping our own."⁹²

Young single workers have typically been thought of as transients who contribute little to a city's bottom line. But in the creative age, they matter for several important reasons. First,

⁹¹ Tankersley, K. (2019, April). A Love for Waco: A conversation with Greater Waco Chamber of Commerce Chair Loren Schwartz. *Wacoan*, 105-122.

⁹² Tankersley, K. (2019, April). A Love for Waco: A conversation with Greater Waco Chamber of Commerce Chair Loren Schwartz. *Wacoan*, 105-122.

young people work harder and longer hours and are less risk-averse than older workers, because they are young and childless. In rapidly evolving industries and economies, it's the most recent graduates who have the most applicable skills. This drives leading companies to aggressively target them in their recruiting strategies and, more importantly to Waco's situation, follow the talent to the cities where these young people want to live.⁹³

Complementing Waco's surging prominence is its strategically favorable position at the center of Texas between two of the fastest growing metropolitan areas in the nation, Austin and Dallas-Fort Worth. According to Schwartz, this, "[postures us] for huge growth, and I think that's very fortunate."⁹⁴ This will almost certainly be one of the principal drivers of Waco's economy in the near future for several reasons.

First, tourism dollars flowing into Waco's downtown and I-35 corridor areas are fueling an economic resurgence in the formerly dilapidated core of the city. Centered around the recently renovated Magnolia Silos, Chip and Joanna's consumer-facing shopping and recreational complex in the heart of downtown, a burgeoning music and restaurant scene has emerged in the area now known as the Silo District. Travelers on I-35 often make a short detour when they arrive in Waco to visit the silos, as they are situated less than a mile from the highway. While visiting the silos, these travelers take advantage of the opportunity to explore Waco's easily-walkable Silo District, either on foot or on the new network of public trolleys that serve the Silo District and the greater downtown area.

Second, Waco's cost of living is significantly more affordable than the nearby metropolitan areas of Dallas and Austin. The following table⁹⁵ breaks down differences in affordability

⁹³ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 306

⁹⁴ Tankersley, K. (2019, April). A Love for Waco: A conversation with Greater Waco Chamber of Commerce Chair Loren Schwartz. *Wacoan*, 105-122.

⁹⁵ 2019 Cost of Living Calendar. (n.d.). Retrieved April 14, 2019, from <https://www.bestplaces.net/cost-of-living/>

between Austin, Dallas, Waco, Texas, and the United States, with the data standardized to the 2019 national averages in each category:

Cost of Living	Austin	Dallas	Waco	Texas	USA*
Overall	101.8	101.8	84.8	101.8	100
Grocery	88.7	92.9	90.8	96.6	100
Health	92.4	98.3	86.1	95.3	100
Housing	157.4	121.2	72.4	98.9	100
Median Home Cost	\$ 294,400	\$ 226,600	\$ 135,400	\$ 184,900	\$ 216,200
Utilities	100	100.8	97.9	99.2	100
Transportation	134.8	138.3	85	119	100
Miscellaneous	98.8	100.8	93.3	96.4	100

**100 = National Average*

Based on this comparison, Waco is clearly more affordable in every category of cost of living than both Austin and Dallas, as well as Texas and the United States at large. Waco's advantage in this regard, combined with its proximity to these larger urban centers, makes it an attractive place to live and work.

Finally, Waco is in a strong position to capitalize on major infrastructure expansions in Texas given that it is situated midway between Austin and Dallas. The expansion of Interstate 35 would bring an even higher volume of traffic through Waco. The construction of much-discussed major high-speed railway projects connecting the major cities of Texas would also greatly benefit Waco, as it would be a likely contender to host an intermediate stop along the Dallas-Austin route. In fact, such a development could enable Waco to leverage its relatively

affordable cost of living to attract creative workers at the major technology campuses in the Austin-Round Rock area to live in Waco and use robust potential mass transit systems such as high-speed rail to commute. While such possibilities may be years, if not decades, from becoming realities, it highlights the potential inherent in Waco's geographic location to be a nexus of commerce in Texas, as it has throughout the state's history.

In order to boost its ability to attract and retain talent, Waco needs to continue to build its quality of place. The city has seen an impressive resurgence of its downtown district due in some part to the draw of Magnolia's Silos and the developments that have occurred around the complex. Continued investments in multi-use, walkable urban spaces in the city's downtown core will enrich the vibrancy of the area as a center of activity and life within Waco. According to Richard Florida, "medium scale density that offers the opportunity for interaction, enough amenities to satisfy members of the creative class, and proximity to hubs of economic and social vibrance, is a good path," for cities to follow as they evaluate ways to revitalize certain parts of the urban environment, especially for suburbs and residential areas that are close to the city's urban core.⁹⁶ Embracing its unique historic downtown and integrating urban revitalization efforts with that history will put Waco at an advantage in the minds of the millions of visitors and potential future residents that visit the city each year.

In addition to its downtown revitalization efforts, Waco has seen the opening of several concert venues and hosts various musical events throughout the year, such as the annual Margarita-Salsa country music festival at the Extraco Events Center. Creation and promotion of similar events and music venues will contribute to Waco's cultural vibrance and increase its quality of place and empower a sense of community among residents and encourage visitors to explore the city during their stays in Waco. In addition to these venues, Waco is the hometown

⁹⁶ Florida, R. (2014). *The rise of the creative class, revisited*. New York: Basic Books. pp. 331

of high-profile musical figures such as Pat Green, Wade Bowen, and even Willie Nelson, who was born and raised just outside the city in Abbott, Texas, roughly 24 miles from Waco. The cultural impact of these individuals in Texas and in the broader country-music scene should be a point of pride for Waco as it continues to build its cultural community to enhance its quality of place.

The final initiative that Waco city and business leaders are focusing much attention on is the development of the downtown riverfront. The Brazos River has been central to Waco's economy since its founding and has been a source of commercial activity and city pride ever since the suspension bridge replaced the ferryboats in 1871. This area of the city has much potential as a fixture of retail, nightlife, and recreational activity, especially as downtown Waco continues to prosper and develop. Loren Schwartz, when asked what Waco needs most urgently at that time, cited the riverfront development effort that was underway at early stages at the time of the interview in April 2019. The riverfront, as well as increased full-service hotel capacity near the riverfront development, is one thing that Schwartz thinks the city needs and eventually will have, despite the slow progress to date. Increasing Waco's hotel capacity will allow high profile members of the business community, in particular Chip and Joanna Gaines' Magnolia enterprise, to host large-scale multi-day events that, at current lodging capacity, are simply impossible to host if the number of attendees is similar to what they experience during their currently active single-day events. Having such capacity would draw multiples of the economic stimulation the city already receives from such single-day events and would allow visitors more time to explore, familiarize themselves with, and spend money in the city.

Tolerance

In order to fully open its gates to potential new residents from a wide range of backgrounds, creative-class or otherwise, Waco must emphasize an openness to all types of diversity. Loren Schwartz names this as a critical issue that the city's leaders have given increasing amounts of attention when marketing Waco to the global talent pool. Schwartz says in her *Wacoan* interview that, "more diversity and inclusion will happen, but we need it because the complexion of our country, of our cities, of our states, has changed. And with that change, there are benefits to being on the front end of that curve, not the last one aboard. So, leading in those areas of diversity and inclusion versus just following [is critical]. And it's purposeful, it is not [an accidental occurrence]."⁹⁷ Waco certainly has work to do in this area, although the mindset of city leaders appears to be oriented toward making progress. Expressing this sentiment when city leaders and developers meet with companies that are considering Waco as a potential site for expansion is as important as emphasizing diversity and inclusion to residents of the community. Hosting cultural events and addressing inequality and residual segregation as a result of socioeconomic factors should be at the forefront of public discourse. City leaders should take the lead in promoting discussion among the business community and other stakeholders about how to uplift disadvantaged minority communities within the city to break cycles of poverty and provide economic opportunity to those who currently do not have access to it. This could be accomplished by encouraging the development of entry-level service or working-class jobs closer to the urban core, near where most of these disadvantaged currently reside, rather than further development of industrial areas in the rural areas near the fringes of the city. In combination with such efforts, the provision of services meant to enhance employability, such as subsidized childcare and transportation services, will give those minority groups who

⁹⁷ Tankersley, K. (2019, April). A Love for Waco: A conversation with Greater Waco Chamber of Commerce Chair Loren Schwartz. *Wacoan*, 105-122.

currently experience obstacles to employment related to transportation or household issues a foothold on the first rungs of the socioeconomic ladder.

Technology

The presence of Baylor University, McLennan Community College, and Texas State Technical Institute represent a broad set of educational opportunities that draw talent to the city. Baylor University in particular possesses formidable research capabilities and a robust entrepreneurship undergraduate department within the Hankamer School of Business, which was ranked 11th in the 2019 Global Entrepreneurship Research Productivity Rankings.⁹⁸ Another world-class asset in Waco's technological and innovative arsenal is the Baylor Research and Innovation Collaborative (BRIC), which is a research park that brings together cutting-edge faculty researchers in emerging technologies, industry partners working to solve real-world problems, and small businesses needing help to bring their ideas to the marketplace, all under one roof in a collaborative, integrated workspace.⁹⁹ The BRIC unites academic research, the resources of large corporate partners, and entrepreneurial drive in order to turn new, innovative technologies into commercially-viable enterprises. To complement the BRIC's output of new ventures, Start Up Waco, a nonprofit organization based in downtown Waco, is aiming to empower Waco-based entrepreneurs through several strategic objectives. The first is to maximize the impact of existing entrepreneurial resources by connecting entrepreneurs to them, measuring their impact, supporting them, and promoting them among the entrepreneurial

⁹⁸ Baylor Entrepreneurship Ranks 11th in the 2019 Global Entrepreneurship Research Productivity Rankings. (2019, April 12). Retrieved from <https://www.baylor.edu/business/news/news.php?action=story&story=208816>

⁹⁹ BRIC - About Us. (n.d.). Retrieved from <https://www.baylor.edu/bric//index.php?id=87885>

community. The second objective is to fill resource gaps in the Waco entrepreneurial ecosystem by creating a co-working space called Hustle, developing early stage capital funds, forming a mentoring program that makes finding the right expertise easy, and curating a resource library for entrepreneurs.

The final objective of Start Up Waco is to build a culture that fosters and celebrates entrepreneurship by promoting a full range of events that celebrate and empower all entrepreneurs and support organizations in the community.¹⁰⁰ Start Up Waco is an example of the focus that city leaders have on building out Waco's entrepreneurial ecosystem, especially in regard to technology entrepreneurship. Schwartz wants, "those great minds staying here instead of feeling like they have to go to Austin or Dallas or Houston or California. We want to keep them right here in our backyard."¹⁰¹ Although city leaders are focused on expanding high-tech industry and innovation in Waco, the creation of such ecosystems do not happen overnight. The steps taken so far appear to be in the right direction, and Waco must continue to generate and attract top talent in order to maintain the momentum that was gained in recent years.

¹⁰⁰ Driving Real Economic Growth for Waco. (n.d.). Retrieved from <https://startupwaco.com/#1516828437607-245cd576-7178>

¹⁰¹ Tankersley, K. (2019, April). A Love for Waco: A conversation with Greater Waco Chamber of Commerce Chair Loren Schwartz. *Wacoan*, 105-122.

Conclusion

Waco's progress on each of the three dimensions of urban development – talent, tolerance, and technology – is considerable compared to where it stood only a decade or so ago. The pall cast on the city's reputation after the Branch Davidian incident in 1993 appears to finally be subsiding in the face of the so-called 'Magnolia Effect,' that Loren Schwartz invoked during her interview with the *Wacoan*. The momentum gained from the success of *Fixer Upper*, which concluded this year, will be continued as Chip and Joanna launch their own network, which is set to air in 2020. The Gaines's operations in downtown Waco and the economic resurgence that took root around the Silo's, combined with other revitalization efforts in Waco's urban core, appear to have replaced stagnancy, which plagued the city since the tornado ripped it apart in 1953, with energy, in the form of new multi-use residential buildings, restaurants, bars, music venues, art galleries, and other amenities that add to the city's quality of place. The tone set by city leaders on the subjects of diversity and inclusion is solidly positive. City officials and high-profile members of the business community recognize the importance of low-barriers to talent, and efforts to uplift the city's disadvantaged minority groups are underway through a multitude of channels, ranging from government to non-profits and community volunteers. Nascent efforts to nurture an ecosystem of entrepreneurship and innovation through efforts such as Start Up Waco and the BRIC have yielded promising results. Given the strength of Baylor's research machinery and focus on entrepreneurship, a pipeline of talent and ideas could bring the city's startup scene to relative maturity sooner than one might expect. Although the city will still have to compete fiercely with hubs such as Austin, Silicon Valley, and other centers of entrepreneurship and innovation, Waco is making strides toward providing a fertile environment for home-grown startups to take root. Continued efforts in this respect will take time and

considerable development efforts by leaders of the community and by local entrepreneurs to bring the best available resources to Waco.

Author Biography

Henry Boehm was born in Waco, Texas on July 20, 1997. He enrolled in the Business Honors Program and the Plan II Honors Program at The University of Texas at Austin in 2015. In college, Henry was the John & Susie Adams Forty Acres Scholar, co-founder of two companies, and was the Vice President of his fraternity, Sigma Phi Epsilon. He graduated in May 2019 and plans to join JPMorgan's Asset and Wealth Management division in Houston, Texas after graduation.